

REMARKS

Attached is a **new Rule 132 Declaration** showing that TEONEX films are non-porous.

Claims 1-8 and 13-19 are active in this application.

The present invention as set forth in **Claim 1** relates to a heat conductive silicone rubber composite sheet, comprising:

a laminated structure with an intermediate layer and a pair of outer layers laminated to both surfaces of said intermediate layer, wherein

(A) said intermediate layer is a layer of a synthetic resin film that displays heat resistance and electrical insulation **and said intermediate layer is non-porous**, and

(B) said outer layers are silicone rubber layers formed by curing a composition comprising (a) an organopolysiloxane, (b) a curing agent, (c) a heat conductive filler, and **(d) a silicon compound-based adhesion imparting agent with at least one functional group selected from the group consisting of epoxy groups, alkoxy groups, vinyl groups, and the group represented by the formula Si-H;**

wherein said curing agent of said component (b) is an organic peroxide.

Okami et al fail to disclose or suggest **(d) a silicon compound-based adhesion imparting agent with at least one functional group selected from the group consisting of epoxy groups, alkoxy groups, vinyl groups, and the group represented by the formula Si-H.**

Okami et al. (U.S. Patent 6,074,963) discloses a thermally conductive composite sheet comprising a porous reinforcing material layer and a cured silicone rubber layer prepared from a silicone rubber composition containing (a) an organopolysiloxane, (b) an

organohydrogen polysiloxane, (c) a platinum group metallic catalyst and (d) a thermally conductive filler. However, Okami et al. is silent as to including in said composition a silicone compound-based adhesion imparting agent having the specified functional group, i.e. component (d) of the composition of the present invention.

Enclosed is a **new Rule 132 Declaration** showing results using an optical microscope to show that all of the polyethylene-naphthalate (PEN) films with a thickness of 25  $\mu\text{m}$  available under the brand name of "TEONEX" from Teijin DuPont are non-porous in the sense of having no pores of at least 0.3 mm in diameter. The measurements were conducted with respect to TEONEX Q51 (thickness: 25  $\mu\text{m}$ ), TEONEX Q51DW (thickness: 25  $\mu\text{m}$ ), TEONEX Q81 (thickness: 25  $\mu\text{m}$ ), and TEONEX Q83 (thickness: 25  $\mu\text{m}$ ).

In addition, for the purpose of reference, measurements were conducted with respect to TEONEX Q65F (thickness: 100  $\mu\text{m}$ ) and TEONEX Q65FA (thickness: 100  $\mu\text{m}$ ) in the same way.

As shown by the photographs, any of the TEONEX Q51, TEONEX Q51DW, TEONEX Q81, TEONEX Q83, TEONEX Q65F, and TEONEX Q65FA does not have observable pores. Specifically, it is clear that the films have no pores of at least 10.00  $\mu\text{m}$  in diameter, much less pores of at least 0.3 mm in diameter.

As shown in the declaration, any TEONEX films with a thickness of 25  $\mu\text{m}$  are non-porous in the sense used in Okami et al.

With regard to the Examiner's position that the subject matter of Claims 1-8 and 13-19 is unpatentable over Okami et al in view of newly cited references disclosing organo-silicon compounds of component (d) as adhesion promoters, it is noted that the silicone rubber layer used in Okami et al does not need any adhesion promoter because the reinforcing material layer is porous. However, on the other hand, in the present invention, incorporation of the component (d) in the composition made it possible to use a non-porous material. This is

marked unexpected improvement even if Okami et al. is combined with one or more of the new references (Stein et al., Ching, Putner et al., Fujoika et al., and Fujiki et al.).

Therefore, the rejection of Claims 1-8 and 13-19 under 35 U.S.C. § 103(a) over Okami et al., Stein et al., Ching, Putner et al., Fujoika et al., and Fujiki et al. is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

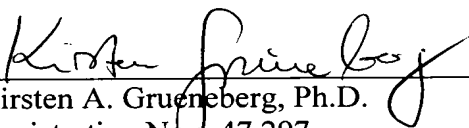
Respectfully submitted,

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